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# A New Species of *Holcoglossum* (Orchidaceae) from China

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**ABSTRACT.** *Holcoglossum weixiense* X. H. Jin & S. C. Chen, a new species of Orchidaceae from Yunnan, China, is described and illustrated. It resembles morphologically *H. sinicum* Christenson and *H. flavescens*, but it can be distinguished from the former by having a transverse callus on the lip, a papillose spur, and a semi-orbicular mid-lobe, and from the latter by its pending habit, longer and semiterete leaves (more than 10 cm), and the semi-orbicular mid-lobe.

**Key words:** China, *Holcoglossum*, Orchidaceae.

*Holcoglossum* Schlechter (Orchidaceae) is distributed mainly in southwestern China, with a few species, e.g., *H. subulifolium* (Reichenbach f.) Christenson, extending to Laos, Thailand, Vietnam, and Malaysia. Because of its pollinia, three-lobed lip, and the short bifid rostellum, this genus is similar in floral structure to *Aerides*, *Papilionanthe*, and *Vanda*, from which several species have previously been transferred, e.g., *H. rupestre* (Handel-Mazzetti) Garay (1972), *H. flavescens* (Schlechter) Tsi (1982), and *H. subulifolium* (Reichenbach f.) Christenson (1987). Although Seidenfaden (1988) stated that it was difficult to define *Holcoglossum*, the new species somewhat coincides with Garay's (1972: 181) delimitation of the genus: "... characterized by the short, footless column with prominent wings. Clinandrium deeply cleft in front; rostellum short, bifid. Pollinia 2, notched, on linear, tapering stipes. Lip sessile with a slender, arcuate spur. Stem rather short, completely enclosed by distichously arranged leaf-sheaths. Leaves articulate, triquetrous or terete."

The new species was collected from the Langan River in northwestern Yunnan. It is somewhat related to *Holcoglossum sinicum* Christenson and *H. flavescens* (Schlechter) Tsi, but is distinguished from

the former by its semi-orbicular mid-lobe, papillose spur, notable callus on the labellum, and from the latter by its pending habit, longer and semiterete leaves (more than 10 cm), and the semi-orbicular mid-lobe.

***Holcoglossum weixiense*** X. H. Jin & S. C. Chen, sp. nov. TYPE: China. Yunnan: Weixi, Langan River, 21 May 2002 (fl), H. K. Kadoorie Program Team 3490 (holotype, PE; isotypes [spirit], KUN, MO, PE). Figure 1.

Habitu *Holcoglossum sinicum* subsimile, sed calcaribus papilloso, inflorescentia caule longiore, labello medio callo notabili instructo bene differt.

Epiphytic plant, pendulous; root terete, thick, white; stem short, 1–2 cm long, enclosed by the leaf-sheathing bases. Leaves 20–30 × 1.5–2.5 cm, coriaceous, semiterete, channeled, articulate at base. Inflorescence lateral, erect, 3–4 cm long, 2- to 4-flowered, exceeding the stem, bracts ovate, 0.7 cm long. Flowers spreading, opening fully, white, tinged with pink; pedicel with ovary 2 cm long; dorsal sepal erect, ovate, 1 × 0.7 cm, 3-veined; lateral sepals oblique at base, seculate, 1.5 × 0.9 cm wide, 4-veined; petals spatulate, 1.1 × 0.6 cm, 3-veined; lip adnate to the column foot, fixed; three-lobed; lateral lobes triangular, erect, with purple streaks on the inner surface; mid-lobe semi-orbicular, entire, 1 × 1.2 cm, with a transverse callus at base toward the entrance of the spur; spur funnel-shaped, papillose, 0.7 cm long; column 0.4 cm long, column foot 0.1 cm long; pollinia 2, notched; stipes obcuneate, 3 mm long. Capsule unknown.

**Distribution.** China: Yunnan, Weixi, Bilou Snow Mountain, at 2300 to 2900 m, in evergreen forest.

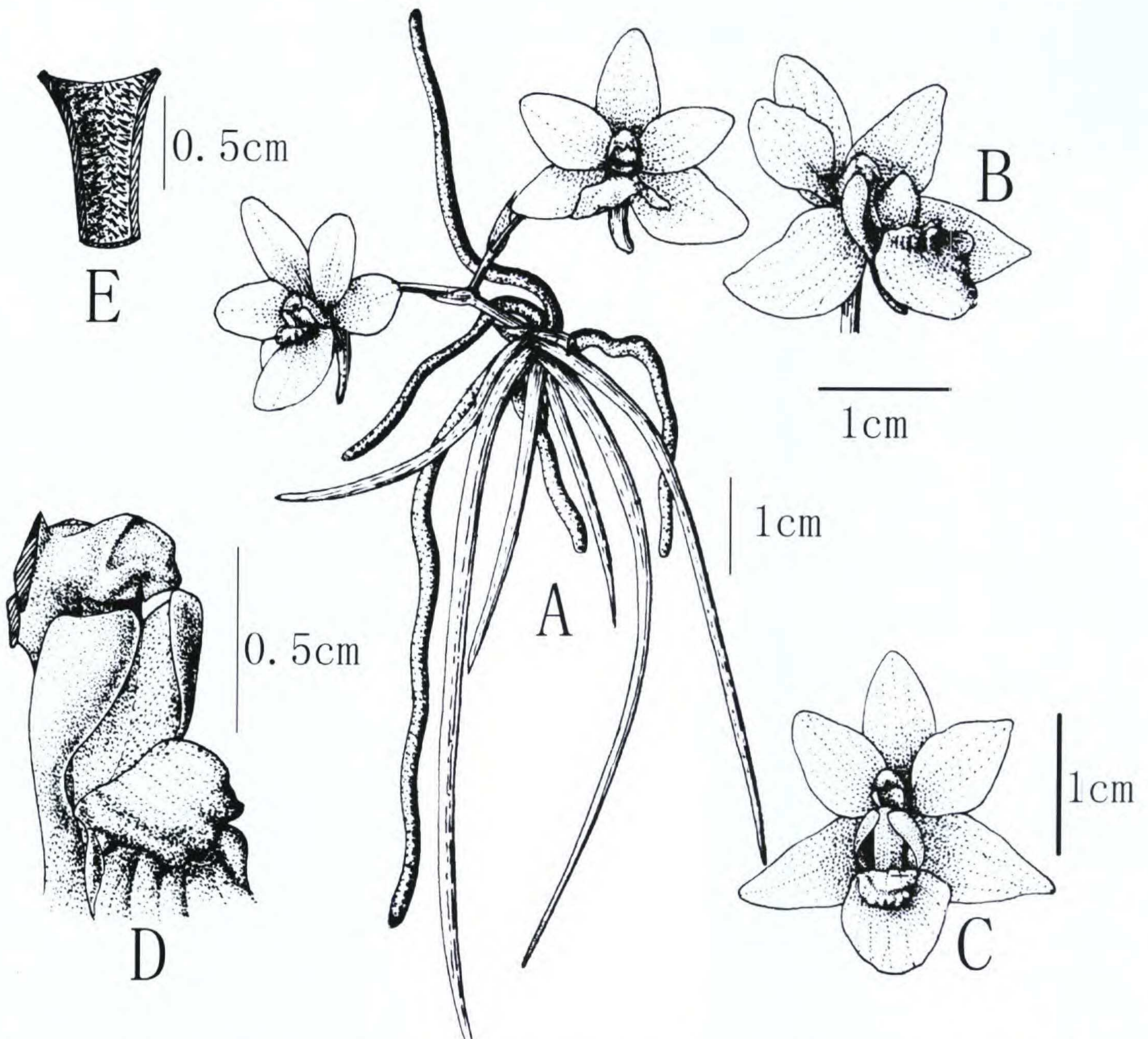


Figure 1. *Holcoglossum weixiense* X. H. Jin & S. C. Chen. —A. Habit and inflorescence. —B. Lateral view of flower. —C. Front view of flower. —D. Lateral view of lateral lobes. —E. Inner wall of spur. Drawn from the type specimen (Hong Kong Kadoorie Program Team 3490) by Yingbao Sun.

*Paratypes.* CHINA. **Yunnan:** Langcan River, 20 July 2001, Hong Kong Kadoorie Program Team 1166 (KUN, PE), 21 May 2002 (fl), Hong Kong Kadoorie Program Team 3486 (KUN), 3497 (PE).

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Literature Cited

- Christenson, E. A. 1987. An intrageneric classification of *Holcoglossum* Schltr. (Orchidaceae: Sarcanthinae) with a key to the genera of the *Aerides-Vanda* alliance. Notes Roy. Bot. Gard. Edinburgh 44: 249–256.
- Garay, L. A. 1972. On the systematics of the monopodial orchids I. Bot. Mus. Leaflet 23(4): 149–212.
- Seidenfaden, G. 1988. Orchid genera in Thailand XIV. Fifty-nine genera. Opera Bot. 95: 304–308.
- Tsi, Z. H. 1982. A study of the genus *Holcoglossum* of Orchidaceae. Acta Phytotax. Sin. 20(4): 439–444.